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MUNICIPAL INFRASTRUCTURE AND IDP HOUSING REHABILITATION PROJECT

Quarterly Report Year 2: 1st Quarter (October - December 2011)

CONTRACT: AID-EDH-I-00-08-00027-00, TASK ORDER: AID-114-TO-11-00002

10 JANUARY 2012; Revised 27 January 2012

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The following document was prepared by Tetra Tech EM, Inc. (<http://www.tetrattech.com>).

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January 27, 2012

Mr. Bradley Carr
Water Irrigation and Infrastructure Advisor
Office of Economic Growth
US Agency for International Development
11 George Balanchine Street
Tbilisi, 0131 Georgia

Re: Revised Quarterly Report Year 2: 1st Quarter (October - December 2011)

Dear Mr. Carr:

This report is being submitted to you in accordance with the requirements of Task Order no. AID-114-TO-11-00002 of Contract AID-EDH-I-00-08-00027-00. It provides Tetra Tech's Revised Quarterly Report Year 2: 1st Quarter (October - December 2011) for the Municipal Infrastructure and IDP Housing Rehabilitation Project based on your review comments.

Very truly yours,

A handwritten signature in black ink, reading 'Jeffrey W. Fredericks', enclosed in a thin black rectangular border.

Jeffrey W. Fredericks, P.E., PhD
Chief of Party
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CC: USAID (George Kokochashvili); MDF (Kartlos Gviniashvili); Tetra Tech (Firouz Rooyani, Dean White, Tom Chicca, Ilia Eloshvili)

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ACRONYMS

CCN	Cooperating Country National
CFR	Code of Federal Regulations
CO	USAID Contracts Office
COP	Chief Of Party
DCOP	Deputy Chief Of Party
DRC	Danish Refugee Council
EA	Environmental Assessment
EC	European Commission
EIA	Environmental Impact Assessment
EPI	Economic Prosperity Initiative USAID Project
ESS	Environmental Scoping Statement
GEL	Georgian Lari
Geo	Geo Ltd
GMIP	Municipal Infrastructure And IDP Housing Rehabilitation Project (the project)
GoG	Government of Georgia
GUWC	Georgian United Water Company
HO	Home Office
ICRC	International Committee of the Red Cross
IDP	Internally Displaced Persons
IL	Implementing Letters
KAV	Kavgiprotransi-Mg Ltd
KfW	Kreditanstalt für Wiederaufbau (German International Development Banking Agency)
LTTA	Long Term Technical Assistance
MDF	Municipal Development Fund
MLHSA	Ministry of Labor Health and Social Affairs
MRA	Ministry of Refugee Affairs
MRDI	Ministry of Regional Development and Infrastructure
NEO	New Economic Opportunities (USAID Project)
NGO	Non-Government Organization
NTP	Notification to Proceed
PE	Licensed Professional Engineer
PEA	Programmatic Environmental Assessment
PMC	Project Management Committee
PMP	Performance Monitoring Plan
SDC	Swiss Agency for Development and Cooperation
SIDA	Swedish International Development Corporation Agency
SOW	Scope of Work
STTA	Short Term Technical Assistance
TBD	To Be Determined
TOCOTR	USAID Task Order Cognizant Technical Officer
Tt	Tetra Tech EM Inc.
UNHCR	United Nations High Commissioner for Refugees
UNTC	United Nations Treaty Commission
USAID	United States Agency For International Development
USG	U.S. Government
WB	World Bank

I. EXECUTIVE SUMMARY

I.1 Authorization

Under the United States Agency for International Development (USAID)/ Caucasus – Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP) Contract No. AID-EDH-I-00-08-00027-00 Order No: AID-I14-TO-I1-00002, Tetra Tech EM Inc. (Tt) is responsible for providing support to monitor current processes and practices, identify and mitigate areas of risk, and carry out oversight and quality control efforts to ensure that selected municipal and IDP infrastructure projects are implemented effectively and in accordance with U.S. and Georgian standards and regulations.

The period of performance for the contract is May 23, 2011– November 22, 2013.

I.2 Purpose of Report

The purpose of this report is to present the progress of the major activities during Year 2 Quarter I (October – December 2011), indicating any problems encountered and steps taken to resolve them or proposing remedial actions as appropriate. The report identifies any problems, delays, or adverse conditions that materially impair Tetra Tech's ability to meet the requirements of the contract.

I.3 Components

The project includes three major components and two subcomponents:

1. Component 1: Municipal Infrastructure
2. Component 2: Rehabilitation of Irrigation Infrastructure
3. Component 3: IDP Durable Housing
 - Subcomponent 1: Provide Water and Sanitation Upgrades for IDP Cottage Housing for IDPs from the August 2008 Conflict
 - Subcomponent 2: Provide Durable Housing Solutions for IDPs from 1990s Conflict

I.4 Summary

During this reporting period, Tetra Tech concentrated on:

- Assisting Municipal Development Fund (MDF) and USAID in finalizing project selection. Site visits were completed to all the municipal infrastructure projects (8), the irrigation projects (2), the cottage settlements (14) and the 93 buildings proposed by MRA for IDP housing rehabilitation.
- Completing the Environmental Assessments for roads & irrigation and finalizing the Programmatic Environmental Assessment for IDP Durable Housing.
- Assisting MDF and USAID in completing and finalizing the procurement documents for the first lot of 12 unoccupied IDP buildings and preparing the draft documents for the design-build irrigation contract.

There were several special events including a 2 day training course on procurement integrity, an irrigation stakeholders meeting, and the inauguration by the U.S. Ambassador of the Tiriponi-Saltvisi Irrigation Systems.

Deliverables for the Reporting Period included:

- Weekly reports

- Various Site Specific Environmental Compliance Plans, Component 1 Roads and Component 2 Irrigation Scoping Statements, Component 2 Irrigation Environmental Assessment (Draft), and Programmatic Environmental Assessment (PEA) for Durable Housing.
- Annual Report for Year 1 (May - Sep 2011)
- Annual Work Plan (FY 2011/12)

Two additional local long term engineering staff were hired.

2. PROGRESS OF MAJOR ACTIVITIES/DELIVERABLES

Activities carried out during the report period included:

2.1 Component I Municipal Infrastructure

2.1.1 Project Selection

The final selection of the Municipal Infrastructure projects is still pending. MDF received letters from Governors & municipalities to prioritize sub-projects. Based on these requests Ministry of Regional Development and Infrastructure (MRDI) has proposed an adjusted list and is expected to submit the complete package of prioritized sub-projects officially in January 2012. The adjusted list as presented in MDF's Semi Annual report (Dec 2011) is shown below:

#	Location	Project Name	Cost Estimate (USD)		Status
			Original Feasibility	MDF ¹ Revised	
1	Dusheti	Installation of River Dushetiskhevi bank protection and restoration-rehabilitation of bridges over the river	1,522,956	1,522,956	
2	Oni	Rehabilitation of water supply head works in town Oni		205,444	Added
3	Gori	Rehabilitation of internal water supply and wastewater networks and installation of water meters in apartment buildings in Gori	872,378	872,378	
4	Gori	Riverbank protection of 26 May river bank in Gori		256,805	Added
5	Gori	Riverbank protection in village Skra, Gori District		205,444	Added
6	Gori	Gori Roads (8.1 km)/ Rehabilitation of road to Gorijsvari Saint George Church in Gori	2,786,210	770,416	Reduced
7	Kareli	Rehabilitation of Sogholasheni-Dvani motor road	2,353,433	2,353,433	
8	Mtskheta	Mtskheta Roads (10.4 km)/ Rehabilitation of roads for development of infrastructure in Mtskheta Municipality	2,311,314	1,212,121	Reduced
9	Oni	Oni Roads (2.6 km)/ Installation of asphalt paving in Town Oni internal roads	940,920	703,647	Reduced
10	Dusheti	Rehabilitation of Town Dusheti streets and storm drains	1,040,542	1,040,542	
11	Gori	Railway Settlement Water Supply, Sewerage and Storm Water Systems	2,497,466		Dropped B/C<1
	Total		14,325,249	9,143,287	

¹ Note: The MDF Revised list of sub-projects and related costs has not been submitted to Tetra Tech for review or approved by USAID.

To fund the proposed sub-projects under the available budget MDF has proposed reducing the volume of civil works under the road projects. Dusheti Riverbank Protection, Sagolasheni-Dvani Road, and Gori Water Supply and Metering sub-projects are priorities for MRDI along with three new sub-projects: i) water supply head works in Oni; ii) river bank protection in Skra, Gori District; and iii) river bank protection in Gori. MDF has recommended that Gori Railway Settlement Water Supply, Sewerage and Storm Water sub-project be dropped.

MRDI has requested the Georgian United Water Company (GUWC) to prepare detailed design of the water supply/sewerage sub-projects. MDF is preparing volume of works for road rehabilitation sub-projects using their "Design Guidelines Manual for Urban and Inter-village Roads". Gori

Municipality has contracted out the designs for the Riverbank Protection of 26 May River Bank in Gori and Riverbank Protection in Village Skra. MDF has proposed that once the designs are completed, tender documents would be issued directly for construction. Tetra Tech will coordinate with MDF on the designs to ensure their quality and all environmental requirements have been met.

Tetra Tech staff (Teimuraz Levanishvili and Mamuka Shaorshadze) carried out site visits to all the originally proposed sub-projects (8) to review the feasibility study results prepared by Ltd Kavpirotrance (KAV). Site visit reports were prepared with remarks and recommendations. The feasibility studies for two of the infrastructure rehabilitation projects - Drinking Water and Sewerage system rehabilitation Project in Railway Settlement in Gori and Dusheti Gorge Rehabilitation Project were sent back to KAV to make the necessary changes and amendments.

2.1.2 Environmental

In September 2011 USAID Bureau Environmental Office (BEO) confirmed that Environmental Assessments (EA) must be prepared for all municipal projects. To carry out the work Tetra Tech mobilized expat STTA, Jim Gallup and Karen Menczer, supported by Mamuka Gvilava, local STTA.

Site-Specific Environmental Compliance Plans (SSECP) for Dushetiskhevi Flood Protection Site were drafted and submitted on October 3.

Site-Specific Environmental Compliance Plans (SSECP) Oni Street Rehabilitation were drafted and submitted on October 3.

Environmental Scoping Statement (ESS) for Municipal Roads was drafted and submitted on November 23.

The Environmental Assessment: For Municipal Road Rehabilitation is being finalized and will be submitted in January 2012.

2.2 Component 2: Rehabilitation of Irrigation Infrastructure

2.2.1 Project Selection

As a result of the Steering Committee meeting in September 2011, it was decided that the USAID funded rehabilitation would include complete rehabilitation of Saltvisi Irrigation System main and distributary canals (46.6 km) serving 9,722 ha; and rehabilitation of Tiriponi Irrigation System main canal and secondary canals (72 km) including the Karbi head works up to the first crossing of occupied territory serving 8,500 ha. Subject to availability of funding the critical/ significant facilities on Tiriponi main canal after first crossing with occupied territories would be added to originally suggested rehabilitation works.

Tetra Tech staff (Otar Maghalashvili, local STTA Irrigation Engineer) conducted numerous site visits to the two project areas to review feasibility study results prepared by KAV. As a result of the site visits; review of Hydrosphere Report, 2009, "Project For Rehabilitation of Tiriponi and Saltvisi Irrigation Systems); OSCE Report prepared by Flag International LTC, December 2008, "ERP Irrigation Assessment Report" and discussions with "Mtkvari M" the KAV/MDF project costs were accepted. A site visit report was prepared with comments and recommendations.

2.2.2 Procurement

USAID and MDF agreed that a design-build contract would be used for the rehabilitation of the irrigation works.

Because of MDF's limited experience with design-build contracts, they requested assistance from Tetra Tech. Tetra Tech provided Mark Jensen, expat STTA, from Oct 18 – Nov 22 to assist in with

this effort. Part 1 and Part 3 of the Irrigation bid documents were submitted for comments to USAID. Part 2 – Employer’s requirements and BOQ schedules prepared by MDF were reviewed and revised by Tt technical team. The documents are being finalized and should be completed by mid-January.

As part of the TA effort, Tetra Tech investigated the capabilities of local design firms to carry out the irrigation design work. It was concluded that there is good local capacity to do the work.

2.2.3 Environmental

In September BEO confirmed that Environmental Assessments must be prepared for the Irrigation projects. To carry out the work Tetra Tech mobilized expat STTA, Jim Gallup and Karen Menczer, supported by Mamuka Gvilava, local STTA.

As part of the EA preparation process consultations were held with representatives from the NGO Georgian Greens Movement and the Ministry of Environment Biodiversity Department. Separate fauna and habitat assessments were carried out.

At the request of USAID an Environmental Scoping Stakeholder Meeting for the Irrigation Rehabilitation component was held on November 18, 2011 at 11:00 at Multifunctional IDP Community Center of the Verkhvebi Settlement, Gori. MDF and Tetra Tech sponsored the event with support from Mtkvari-M, the Irrigation Company responsible for operating and maintaining the Tiriponi and Saltvisi Irrigation Systems. The meeting was well attended (27 persons, including 8 females). Participants included various stakeholders from the local communities as well as local government authorities. A report was prepared.

The Environmental Scoping Statement for Irrigation Rehabilitation Activities was drafted and submitted on November 15.

The Draft Environmental Assessment for Irrigation Rehabilitation Activities was submitted on December 28.

2.3 Component 3: IDP Durable Housing Subcomponent 1: Provide Water and Sanitation Upgrades for IDP Cottage Housing

2.3.1 Project Selection

The final selection of the works to be carried out for the cottage housing is still pending. USAID remains committed to providing both water and sanitary upgrades to the cottage settlements where feasible and needed.

Tetra Tech staff (Ivane Manjgaladze and Giorgi Avsajanishvili) conducted site visits to each of the 14 cottage settlement communities to evaluate the feasibility report results prepared by GEO Ltd. The evaluation included an inventory of the availability of drinking and irrigation water, garbage disposal and sewerage systems.

At the request of USAID, Tetra Tech investigated different types of waste water treatment options for the settlements. The study estimated initial costs, O&M costs, and area requirements for septic systems with infiltration field, aerated lagoons, and a package activated sludge system. A local firm, Geo Engineering, was contracted by Tetra Tech to conduct field investigations on ground water levels and infiltration rates. Hydrogeological (1) and infiltration tests(9) were conducted at 9 of the cottage communities where sanitary upgrades are being proposed. The results confirmed that 3 of the cottage communities have water tables < 1 m and could not be used for a standard septic tank/infiltration system. The results also confirmed that water tables and infiltration rates at the remaining 6 cottages were appropriate for installing a standard septic tank/infiltration system fields.

Tetra Tech also submitted cadastral map/ownership information to National Agency of Public Registry to determine the ownership of the land proposed for the septic system and infiltration field sites. The results are expected mid-January.

USAID and MDF are considering using USAID funds to provide external water supply and drainage improvements based on designs prepared under a World Bank/European Union funded contract with HOLINGER International Consultants (Switzerland). Tetra Tech is currently reviewing the designs.

The current proposal assumes that USAID will fund external water supply improvements for 7 communities, drainage for 6 communities, internal water supply hook-ups for 8 communities, shower and toilet systems for 6 communities, shower systems for 3 communities, and waste water treatments systems and collection systems for 6 communities (only those where groundwater levels >2 meters and septic tank with infiltration fields are technically feasible). The list of cottage communities and proposed works is shown below:

No.	Location	# of HH	# of Individuals	Water Supply	Drainage	Inside water connection	Sewage system (network, septic tank w Infiltration field)	Shower and toilet building	Shower
1	Akhalsopeli	100	350	Yes	Yes	Yes	Yes	Yes	
2	Mokhishi	58	220	Yes		Yes	Yes	Yes	
3	Skra	86	312	Yes		Yes	Yes	Yes	
4	Karaleti	480	1,644		Yes				Yes
5	Berbuki	134	460	Yes		Yes			Yes
6	Shavshevbi	177	586	Yes		Yes	Yes	Yes	
7	Khurvaleti	139	460	Yes	Yes	Yes	Yes	Yes	
8	Teliani	54	164		Yes	Yes			
9	Metekhi	35	128						
10	Tsilkani	400	1,093	Yes	Yes	Yes	Yes	Yes	
11	Frezeti	300	721		Yes	Yes			
12	Tserovani	2,100	5,533						
13	Verkvebi	300	889						
14	Sakhasheti	100	220						
	Total	4,463	12,780	7	6	9	6	6	3

2.3.2 Environmental

The initial draft Programmatic Environmental Assessment (PEA) prepared by Tetra Tech was submitted on August 28. After receiving questions and comments from USAID on November 17, the final response to all USAID/BEO comments was submitted on November 23.

2.4 Component 3 IDP Durable Housing Subcomponent 2: Provide Durable Housing Solutions for IDPs

2.4.1 Project Selection

Out of 204 buildings originally identified for rehabilitation by MRA, 161 buildings were screened by GEO LTD (MDF contractor) for structural stability. GEO Ltd then prepared a technical feasibility study that included sketch drawings and BOQs for a subset of 119 buildings. From this subset Ministry of Refugee Affairs (MRA) selected 93 buildings for rehabilitation.

Tetra Tech staff (Giorgi Avsajanishvili, Ivane Manjgaladze, Gela Bochorishvili, George Kvenetadze, Teimuraz Levanishvili, Mamuka Shaorshadze and Jim Hayden) conducted site visits and prepared an inventory on each of the 93 buildings to verify the results of the GEO LTD technical feasibility study. Among the items inspected/inventoried and information collected were availability of external water supply, gas and electricity; number of floors; structural condition of the buildings; types of roofing; number of IDPs or non IDPs living in the selected buildings; GPS building coordinates; photos, etc.

USAID and MDF also agreed that only those buildings that were connected to a central sewage and water supply system would be rehabilitated. In November GUWC provided a letter confirming that based on the list of 93 buildings only 53 buildings were currently connected or were able to be connected.

A cadastral inventory through the National Agency of Public Registry was also conducted by Tetra Tech to verify ownership status of each of the buildings. Four of the 53 buildings were confirmed privatized, six were confirmed as belonging to the government and the remaining 43 still need clarification.

To replace the buildings removed from the original list, MRA in November provided a list of 36 hospitals for consideration for rehabilitation as IDP housing. Of these MDF identified 27 that were structurally stable. During December Tetra Tech staff (Teimuraz Levanishvili, Mamuka Shaorshadze, and Givi Varduashvili) conducted site visits to 18 of the 27 identified hospitals. The remainder will be inspected during next quarter. Of the 18 buildings visited by Tetra Tech, Tetra Tech recommended rejection of six; four because of structural reasons, one because it is privatized, and one because it is occupied.

For the first procurement package MRA agreed that only unoccupied buildings (12) should be rehabilitated. This was to allow additional study on procedures for temporarily resettling IDPs from the occupied Community Centers during construction. To confirm the status of these 12 buildings Tetra Tech staff (Teimuraz Levanishvili and Mamuka Shaorshadze) revisited each of the sites. A PO was also signed with Intelligent Cadastre Group (Kutaisi) to conduct the cadastral survey of the 12 buildings to confirm their ownership status. The results of the cadastral survey are expected in January.

Tetra Tech staff (Givi Varduashvili and Teimuraz Levanishvili) prepared example BOQ volume of works for the outside infrastructure of IDP Buildings for use by MDF as part of the tender documents.

2.4.2 Procurement

Per request of MRA, it was agreed that the initial tender would be for the 12 unoccupied buildings. Bidding documents for the first lot of 12 unoccupied IDP Buildings were prepared by MDF with major assistance from the Tetra Tech team led by Ilia Eloshvili, DCOP. He was assisted by Mamuka Gvilava, Sergo Gviniashvili, Givi Varduashvili, Jim Hayden (expat STTA), and Moenes Youannis (expat STTA). The documents went through a rigorous review and approval process by USAID. They were signed off by the Mission Director on December 29. MDF issued the advertisement for tender on December 30. The Contractors' proposal due date is February 10, 2012.

2.4.3 Environmental

The initial draft PEA prepared by Tetra Tech was submitted on August 28. After receiving questions and comments from USAID on November 17, the final response to all USAID/BEO comments was submitted on November 23.

2.5 MDF Financial Review

USAID is implementing their agreement with MDF through two implementation letters (IL). Included in the ILs are the Cash Advance/Liquidation Policies and Procedures to be followed by MDF in receiving and liquidating advances. Under Tetra Tech's contract with USAID, Tetra Tech is responsible for the review and approval of all MDF advances and liquidation of these advances. Sergo Gviniashvili is the Tetra Tech financial specialist conducting the review.

During the report period Tetra Tech reviewed and cleared advances #5, #6, and # 7. Through the period ending December 2011, a total of USD 174,000 or 0.33% of the total MDF budget has been disbursed.

2.6 Training/Workshops/Events

2.6.1 Procurement Integrity Course

A Procurement Integrity Course was carried out October 19- 20 at the Radisson Blu Iveria Hotel, Tbilisi, by David Casella (Tetra Tech ENE Contracts and Legal Officer). Eka Gamezardashvili (USAID) conducted one of the sessions. The goals of the course were to: i) understand and be able to describe procurement integrity rules and regulations that pertain to U.S. Government and World Bank purchasing; and ii) understand the procurement integrity and compliance considerations of procuring goods and services with USAID funding. There were 21 participants (including 7 women). All the participants received Certificates of Achievement. A report was prepared.

2.6.2 Irrigation Project Inauguration

An inauguration of the Tiriponi-Saltvisi Irrigation Systems was held at a location along the Tiriponi Main Canal in the village of Kere, Gori district on December 1. The inauguration was attended by U. S. Ambassador to Georgia John Bass; Minister of Regional Development and Infrastructure, Ramaz Nikolaishvili; and Minister of Agriculture, Zaza Gorozia. The facilitation of the event was conducted by the Executive Director of MDF, Levan Chichinadze. Representatives from USAID included Brad Carr (COTR), Erica Rounsefell (Health & Social Development Office) and George Kokochashvili (Engineering Specialist). U.S. Ambassador as well as the Georgian Government officials gave welcoming speeches and stressed the importance of the Project and its potential for improving agriculture and the livelihoods of the people in the region. The local community was well represented. The event was broadcast on Georgian TV.

2.7 Project Management/Coordination

2.7.1 General

Tetra Tech staff have daily communications with USAID (Brad Carr, COTR, and George Kokochashvili, Engineering Specialist) and MDF (Kartlos Gviniashvili, project coordinator). Regular weekly meetings were held with the Tetra Tech TA team and the USAID at the Tetra Tech Office. Tetra Tech staff also participate in the regular weekly USAID/MDF coordination meetings held at MDF.

2.7.2 Coordination with Other Donors and Technical Assistance Activities

Tetra Tech staff participated in the following meetings during the quarter:

- A USAID/Tetra Tech meeting was held on November 17 at USAID to discuss procurement procedures for preparing the bid documents for rehabilitation of IDP Housing and Irrigation. USAID staff attending the meeting included Jonathan Chappell (RCO), Maya Chelidze (Acquisition Specialist), Brad Carr (COTR) and George Kokochashvili (Engineer). Tetra Tech staff attending included Jeff Fredericks (COP), Ilia Eloshvili (DCOP), Jim Hayden (STTA), and Mark Jensen (STTA). Zurab Baratashvili participated from MDF.
- COP and DCOP attended the USAID Partners Meeting held on October 10 at USAID.

- COP and DCOP attended the EG/DG Partners' meeting held at USAID on November 30.
- Tetra Tech staff attended the International User Conference on Geoinformation Systems & Remote Sensing held at the Courtyard Marriott on November 16.
- COP attended the Ambassador Reception for USAID Mission Director at the Ambassador's Residence on November 29.
- A meeting was held on December 6 with New Economic Opportunities (NEO) Project at their offices to get a briefing on their current activities.

2.7.3 Quality Assurance/Quality Control

At the request of USAID as a follow-up to the Procurement Integrity Training course, Tetra Tech (Sergo Gviniashvili) is assisting MDF in the preparation of a Procurement Integrity Plan.

Tetra Tech (Ilia Eloshvili) prepared and presented the Project Governance and Management Plan outline for GMIP to USAID and MDF. Based on the presentation MDF prepared their framework for Construction Supervision.

Tetra Tech staff (Mamuka Gvilava) prepared draft guidelines for establishing a Document Control Center. They were reviewed by Tetra Tech Home Office (Terri Stiffler). Final guidelines are under preparation. A share point site was opened on the Tetra Tech TTSVCS server.

A draft set of GMIP Technical QA/QC Guidelines for Contractors / Sub-Contractors was prepared by Vasil Apkhazava, Tetra Tech QA/QC Engineer. These guidelines are under internal review.

2.7.4 Branding Implementation Plan and Marking Plan

A project fact sheet was prepared by Tetra Tech (Archil Lezhava).

2.8 Reports and Deliverables

The following reports and deliverables were submitted during the quarter:

#	Report	Date
1	Weekly Status Reports	Weekly
2	Site Specific Environmental Compliance Plans (SSECP) Oni Roads Project	October 2
3	Site Specific Environmental Compliance Plans (SSECP) Dusheti Flood Protection	October 2
4	Cottage Site Visit Report (Ivane Manjgaladze, Giorgi Avsajanishvili)	October 11
5	Site Visit Report Internal Water Supply for the Kombinat settlement in Gori (Teimuraz Levanishvili)	October 12
6	Annual Report for Year 1 (May - Sep 2011)	November 10
7	Procurement Integrity Training Report Oct 19 - 20, 2011 (David Casella)	November 13
	Component 2 Irrigation Scoping Statement	November 15
8	GMIP Fact Sheet	November 16
9	Programmatic Environmental Assessment (PEA) for IDP Durable Housing Activity (Final)	November 21
10	Component 1 Municipal Infrastructure Roads Scoping Statement	November 23
11	Annual Work Plan (FY 2011/12)	November 27
12	Assignment report Oct 20 - Nov 25, 2011 (James Hayden)	November 30
13	Component 2 Irrigation Environmental Stakeholder Meeting Nov 18, 2011 (Mamuka Gvilava)	December 4
14	Assignment Report Oct 10 - Nov 25 (Mark Jensen)	December 7
15	Report on Septic Waste Water Treatment Systems for the Cottage Communities (Mark Jensen)	December 7
16	Site Visit Report on 12 Buildings in the First IDP Housing Procurement (Teimuraz Levanishvili, Mamuka Shaorhadze)	December 13
17	Procurement Documents for Rehabilitation Works for IDP Housing ICB No: USAID/W/ICB/01-2011	December 15
18	Roads Site Visit Reports: Oni, Gori, Dusheti, Mtskheta, Kareli (Teimuraz Levanishvili, Mamuka Shaorshadze, Giorgi Bichiashvili)	December 23
19	Assignment Report Dec 1-17, 2011 (Jim Gallup)	December 23
20	Site Visit Report to 9 Hospital buildings (Teimuraz Levanishvili, Mamuka Shaorhadze, Givi Varduashvili)	December 28
21	Tech's Environmental Assessment (EA) for Component 2: Irrigation (Draft Report)	December 29

3. ACTIVITIES PLANNED FOR NEXT QUARTER

Activities planned for next quarter include:

3.1 Component I Municipal Infrastructure

3.1.1 Project Selection

The formal prioritized list of Municipal sub-projects is expected to be officially submitted by MDF to USAID in early January 2012.

Tetra Tech will conduct site visits and desktop analysis to verify the feasibility and design costs for these projects. The proposed new projects are expected to include:

- Water supply head works in Oni;
- River bank protection in Skra, Gori District; and
- River bank protection in Gori.

3.1.2 Design

Based on the approved projects Tetra Tech will review the following designs:

- 2 Water supply/sewerage sub-projects being prepared by GUWC: Rehabilitation of Water Supply Head Works in Town Oni and Rehabilitation of Internal Water Supply and Installation of Water Meters in Apartment Buildings in Gori
- 5 road rehabilitation sub-projects prepared by MDF
- 2 Riverbank Protection of 26 May River Bank in Gori and Riverbank Protection in Village Skra contracted out by Gori Municipality.

3.1.3 Procurement

Based on the approved projects Tetra Tech will assist in preparing and reviewing the bid documents for the following projects:

Project Name	Location
Installation of River Dushetiskhevi bank protection and restoration-rehabilitation of bridges over the river	Dusheti
Rehabilitation of water supply head works in town Oni	Oni
Rehabilitation of internal water supply and wastewater networks and installation of water meters in apartment buildings in Gori	Gori
Riverbank protection of 26 May river bank in Gori	Gori
Riverbank protection in village Skra, Gori District	Gori
Gori Roads (8.1 km)/ Rehabilitation of road to Goriyvari Saint George Church in Gori	Gori
Rehabilitation of Sogholasheni-Dvani motor road	Kareli
Mtskheta Roads (10.4 km)/ Rehabilitation of roads for development of infrastructure in Mtskheta Municipality	Mtskheta
Oni Roads (2.6 km)/ Installation of asphalt paving in Town Oni internal roads	Oni
Rehabilitation of Town Dusheti streets and storm drains	Dusheti

3.1.4 Environmental

The following activities will be carried out during next quarter:

- Submit the EA for Municipal Road Rehabilitation (January)
- Draft and submit ESS (March)
- Begin draft EA for Water Supply (March)
- Begin ESS Flood Protection (March)

3.2 Component 2: Rehabilitation of Irrigation Infrastructure

3.2.1 Procurement

The following activities will be carried out during next quarter:

- Assist MDF in finalizing and issuing tender documents (Jan)
- Assist MDF in organizing pre-bid meeting (Feb)
- Assist MDF in organizing review of proposals and selecting a Contractor (Mar)

3.2.2 Design/Construction Oversight

The following activities will be carried out during next quarter:

- Mobilize Tetra Tech QA field team (Feb)
- Attend Start-up Meetings (Mar)
- Train Contractor on QC/DCC procedures (Mar)
- Review Contractor Preliminary Project schedule, QC Plan, and Safety Plan (Mar)

3.2.3 Environmental

The following activity will be carried out during next quarter:

- Receive questions and comments from USAID BEO on EA and submit final response (Feb)

3.3 Component 3: IDP Durable Housing Subcomponent 1: Provide Water and Sanitation Upgrades for IDP Cottage Housing

3.3.1 Project Selection:

The following activities will be carried out during next quarter:

- Complete Cadastral ownership survey for acquisition of land to be used for WWTF (Jan)
- Feasibility design of a rain harvesting option for providing irrigation water for gardens (Jan)
- Feasibility design of grey water disposal method (Feb)
- Final selection of the works to be approved by GOG and USAID (Jan)

3.3.2 Design

The following activity will be carried out during next quarter:

- Complete review of water supply and drainage improvements based on designs prepared by HOLINGER International Consultants (Jan)

3.3.3 Procurement

The following activity will be carried out during next quarter:

- Assist MDF in preparing and reviewing the bid documents for a design-build contract (Mar)

3.3.4 Environmental

The following activity will be carried out during next quarter:

- Subject to BEO requirements carry out an EA for the water supply and drainage component

3.4 Component 3 IDP Durable Housing Subcomponent 2: Provide Durable Housing Solutions for IDP from 1990s Conflict

3.4.1 Project Selection

The following activities will be carried out during next quarter:

- Complete site survey of remaining 9 hospitals on MRA list (Jan)
- Complete cadastral ownership survey for the 12 buildings included in the first IDP Housing Procurement being carried out by Intelligent Cadastre Group (Jan)
- Conduct Cadastral ownership survey for remainder of eligible buildings on original MRA list (Feb)

- Assist in developing procedures be used for temporary resettlement of IDPs during rehabilitation of the occupied community center buildings (Feb)
- Final selection of the buildings to be approved by GOG and USAID (Mar)

3.4.2 Design

The following activities will be carried out during next quarter:

- Assist MDF in preparing BOQs for external works for IDP Housing (Jan)
- Assist MDF in preparation of Design tender for hospitals to be rehabilitated for IDP housing (Feb)

3.4.3 Procurement

The following activities will be carried out during next quarter:

- Assist MDF in conducting pre-tender meeting for 1st Procurement of 12 buildings (Jan)
- Assist MDF in proposal review and contractor selection process (Feb)
- Assist MDF in preparing the bid documents for 2nd procurement of next set of buildings (Mar)

3.4.4 Construction Oversight

The following activities will be carried out during next quarter:

- Mobilize Tetra Tech QA field team (Feb)
- Attend Start-up Meetings (Feb)
- Train Contractor on QC/DCC procedures (Mar)
- Assist Contractor in selecting Mock-up site and provide TA on Building Mock up (Mar)
- Review Contractor Project schedule, Site Management Plan, QC Plan, Safety Plan, and SSEMMP (Mar)
- Review ready for construction drawings (Mar)

3.4.5 Environmental

The following activity will be carried out during next quarter:

- Subject to BEO requirements carry out a supplemental assessment on the biohazard issues involved in converting hospitals for use as IDP housing

3.5 Project Management

The following activities will be carried out during next quarter:

- Finalize Procurement integrity Plan (Jan)
- Finalize GMIP DCC Guidelines and establish GMIP Document Control Center (Feb)
- Finalize Guidelines GMIP Contractor QA/QC Guidelines (Feb)
- Tetra Tech QA Plan (Feb)
- Evaluation of GMIP Construction Management and Supervision Program (Feb)
- Open regional Office in Kutaisi (Feb)
- Coordination with Other Donors and Technical Assistance Activities as required

3.6 MDF Financial Review

The following activity will be carried out during next quarter:

- Review and clear MDF advances

3.7 Training/Workshops/Events

The following activities will be carried out during next quarter:

- DCC Training
- QA/QC and Mock-up Site Training for 1st IDP Housing Contract

- Prepare success story on contract award for IDP Buildings and Irrigation

3.8 Reports and Deliverables

The following reports and deliverables are planned for next quarter:

Report	Date
C. Bi-Weekly Meetings and Reporting	As required
E. Quarterly Progress Reports	January 10
G. Environmental Assessment (Roads)	January 16
H. Performance Monitoring Plan (PMP)	TBD

4. PROBLEMS AND ISSUES

4.1 Technical & Geographical Diversity of the Proposed Projects

GMIP is composed of a wide range of type of sub-projects, from roads, flood control, the installation of domestic water supply and wastewater systems, to the rehabilitation of IDP apartment buildings and improved water supply and sanitation for IDP cottage communities. Additionally, the sub-projects are situated over a fairly wide area of Georgia, and travelling from one to another can take several hours by road. There will be potentially over 90 IDP apartment buildings located in 5 regions, 14 cottage communities, infrastructure improvement projects in 5 municipalities, and irrigation rehabilitation in two large schemes. Successfully covering Quality Assurance (QA) on all these sub-projects will be a major challenge. This wide diversity of activities over a wide geographical area presents engineering, management and site supervision challenges.

4.2 Roles & Responsibilities of Tetra Tech

Tetra Tech has many and varied roles and responsibilities under the GMIP program, from oversight on project management, construction, procurement, and Quality Assurance and Quality Control, to support in document preparation, environmental and other studies, as well as analyses of studies prepared by others. To assume and prepare for these roles and responsibilities, Tetra Tech has assembled a staff focused on oversight. Tetra Tech has limited staff poised to assume direct design review, or direct contract management. Although maximum use of local consultants will be emphasized, arrangements have been made to allow the project to draw on Tetra Tech's cadre of home office engineers as STTA when required.

4.3 Capacity of MDF

MDF has in-house capacity to implement the program; however there is a concern that they are stretched too thin and may not be able to provide the degree of on-sight supervision required by USAID. MDF is currently considering a project management system which would place a Project Manager (PM) over each of the various contracts with a Core Team supporting the PM and a Site Team placed in the field to directly monitor and supervise the construction activities. Tetra Tech continues to assess the capacity of MDF to engage and timely complete its various tasks in support of the GMIP activities. It may be necessary to have MDF outsource some of the design and construction supervision activities.

4.4 Component I Municipal Infrastructure

The final selection of the municipal infrastructure sub-projects is still pending. MDF is proposing an additional three new projects. To fund the proposed sub-projects under the available budget MDF has proposed reducing the volume of civil works under the road projects.

Separate EAs will be needed for the water supply and flood protection projects. This will require additional Tetra Tech LOE.

A review of the Kavgioprotrans-mg" Ltd (KAV) feasibility studies on the 5 road projects showed one project, Gori internal roads, where KAV under reported the total length. The estimated cost should be increased by 3%. KAV also failed to investigate the infrastructure plan for each of the municipalities to ensure that all planned works such as sewage, water, power, communication lines, etc. were completed prior to the start of the USAID funded rehabilitation. To avoid having the USAID funded works torn up, USAID should not fund any road repairs unless all other planned infrastructure along the roads has been implemented.

A review of the KAV feasibility studies for Internal Water Supply and Installation of Water Meters in Apartment Buildings in Kombinat Settlement in Gori showed KAV underestimated various

installation costs and failed to recognize that booster pumps would be required for the 7 buildings with 6 – 9 stories. This would increase the costs by almost 25 %. Ownership of the buildings and flats and responsibilities of each owner (municipality & flat tenant) in maintaining the building/flat water supply piping system should also be investigated. Convincing residents to accept installation of water meters instead of paying a flat rate water fee based on number of family members may be an issue. Water piping system inside the apartments will not be replaced under the project. Measures for testing the individual apartment piping system must be established to ensure that the existing piping system can accept the increased water pressures without leaking. Gori has a central sewer collection system. Although it is operational it is old and overloaded. Measures must be provided to ensure expected increases in waste water can be properly removed.

4.5 Component 2: Irrigation Infrastructure

Based on the review of the KAV feasibility studies Tetra Tech has recommended that final cost estimates should be elaborated by the designer under the proposed design/build contract. A thorough canal & structure inventory, detailed design for Karbi head works, and details on measurement structures will also be required. Other recommendations include the use of performance based testing procedures for acceptance and turnover of works; mapping the net irrigable boundaries and preparing an ArcGIS spatial database; preparation of an O & M plan; and evaluation of the maximum area that can be irrigated based on the available water supply.

Based on the experience during the Feasibility phase the capacity of local contractors remains a concern. Several local design firms were visited to confirm that the capacity to do the design work is available locally.

Maintaining flows in the canals during construction is another issue. Any shutdown of parts of the irrigation system during the irrigation season must be managed properly to avoid water shortages that could adversely affect crop yield and income. MDF must ensure proper coordination and scheduling by the Contractor with Mtkvari-M and the users. The Contractor will be required to prepare a plan agreed upon by MDF that ensures continued flow during the construction period.

4.6 Component 3: IDP Durable Housing Subcomponent 1: Water and Sanitation Upgrades for IDP Cottage Housing

Because no village and only a few cities in Georgia have sewage treatment, MRDI and MDF are reluctant to finance construction of waste water treatment systems at cottage settlements. There is also concern that the municipalities and the cottage settlements will not be able to cover O&M costs. This limits the options that can be used. Currently the only alternative being considered is the use of septic tanks with infiltration fields. Even this option can only be used in locations where the water table is below two meters and sufficient land is available for the infiltration field. Therefore sanitary upgrades will be provided only to those cottage communities that meet the criteria listed above.

Supplemental water supply through new wells or increased groundwater pumping was expected to be carried out by other donor agencies. Therefore it was not considered in the preparation of the Programmatic Environmental Assessment (PEA). Additional environmental clearances from USAID may be required.

4.7 Component 3 IDP Durable Housing Subcomponent 2: Durable Housing

Of the various program components, the IDP durable housing will be the most complicated component to address. The issues surrounding IDPs and the intense sensitivity of IDPs, their interaction with each other and with broader non-IDP communities, can be complicated and require careful consideration throughout to avoid possible problems during implementation. Cooperation

during the early stages between MRA/MDF and USAID to identify, anticipate and plan actions required to mitigate risks for all possible issues will be essential for final success. IDPs in the durable housing units will be relocated during and after the construction. Experience has shown this practice of moving the IDPs is a very complicated issue requiring careful and thorough planning. If temporary relocations are implemented without good and regular communication, and without adequate provision for quality of life issues, IDPs will not only fail to support the rehabilitation, but the larger Georgian community (NGOs, politicians, etc.) may fail to support it, and may actively work against the project. Poorly planned and implemented temporary relocation could derail support for the project. Mitigation, in the form of a Resettlement Plan with regular and inclusive communication, will be required to offset any adverse impacts. MRA has taken responsibility for relocating IDPs during construction works; however no funds have been allocated to date. To provide time to better plan for the relocation process only uninhabited buildings will be rehabilitated as part of the first procurement. It may be necessary for MDF to outsource to a firm preparation and implementation of a proper resettlement plan. Several options are being considered if no satisfactory solution can be found for temporarily resettling IDPs to include rehabilitating of unoccupied hospitals and/or construction of new buildings.

Ownership of the buildings and surrounding property as well as connection to an external central water supply and sewage system have become major issues. Of the original 93 buildings identified by MRA for rehabilitation only 53 buildings are currently connected or can be connected to a central water supply or sewage line. Only 6 of the 53 have been confirmed to belong to the government. At USAID's request Tetra Tech is conducting cadastral surveys to try to clarify the ownership status of the remaining buildings.

Certain discrepancies were revealed while comparing Ltd "GEO" BOQs and information, gained during Tetra Tech site visits. This included failure in some locations to consider rehabilitation of internal staircases and internal water piping; supplying gas and electric heating systems; and replacement of roofs by other donor projects. GEO also failed to consider exterior works such as paving of access roads and parking lots, landscaping, arranging external gas piping, providing external power supply and appropriate grounding, connecting to external water supply sewerage system, and arranging playgrounds. Including these items would increase GEO's total costs per building by 6%.

The consideration of rehabilitation of hospitals for IDPs was not specifically included in the original PEA prepared for the project. If hospitals will be rehabilitated for use as IDP housing it may be necessary to address the issue of how best to handle biohazard waste. Additional environmental clearances from USAID may be required.

4.8 Administrative Issues

Establishment of a Regional office in Kutaisi is under discussion with USAID. Tetra Tech staff housed in a regional office will be able to manage field activities on a more cost-efficient basis during construction.

Tetra Tech may need additional vehicles to support the QA program. At this stage, 3 vehicles are serving the project and one more additional car is planned after the start of construction works.

5. STAFF LEVEL OF EFFORT

The GMIP LTTA and STTA professional, technical, and administrative support staff for the reporting period are presented below:

5.1 Resident Staff

In the month of October, Tetra Tech announced and advertised a vacancy for a Senior Civil Engineer position on local job sites. More than 40 applications were received. After screening and interviewing candidates two additional local long term engineering staff were hired:

- Givi Varduashvili, Senior Civil Engineer
- Vasil Apkhazava, QA/QC Engineer

Resident Tetra Tech staff are listed below:

NAME	POSITION
Jeffrey Fredericks, P.E. PhD	Chief of Party
Ilia Eloshvili	Infrastructure Manager & DCOP
Teimuraz Levanishvili	Housing Rehabilitation Manager,
Mamuka Shaorshadze	Environmental Specialist
Archil Lezhava	Displaced Person Relations/Outreach
George Nizharadze	Office Operations Manager
Irakli Kakulia	Paralegal/Licensing & Permits
Givi Varduashvili	Senior Civil Engineer
Vasil Apkhazava	QA/QC Engineer
Maia Dvali	Translator/Interpreter

5.2 Short Term Staff during the Report Period

The following expat STTA provided support in Georgia during the report period:

- David Casella, Procurement Integrity Training (Oct 16 - 21)
- Mark Jensen, Sr. Water Resources Engineer (Oct 18 – Nov 22)
- Jim Hayden, Construction Engineer (Oct 20 – Nov 25)
- William James, Sr. Project Manager (Oct 25 - Nov 21)
- Jim Gallup, Environmental Specialist (Dec 3 – 17)

The following expat STTA provided support from the home office or from the US during the report period:

- Moenes Youannis, Procurement/Project Management Specialist
- Karen Menczer, Environmental Specialist
- Terri Stiffler, Construction Management QA/QC Engineer

Since the start of the project, several local staff were hired on STTA basis and their contracts are still ongoing. This includes Otar Maghalashvili, Ivane Manjgaladze, and Giorgi Avsajanishvili. David Girgvliani and Mamuka Gvilava had their contracts extended through the end of the current quarter.

After the STTA candidate proposed for IDP Coordinator (Lela Shatirishvili) declined to participate in October, Tetra Tech used local job sites to announce and advertise the STTA vacancy. Over 53 resumes were received. These persons were short-listed to 10. Several candidates were interviewed. Hiring for the position was postponed until the role of this position can be better defined.

Short Term Staff during the Report Period are listed below:

NAME	POSITION
James Gallup, P.E. PhD	Environmental Specialist
Karen Menczer	Environmental Specialist
David Casella	Director, Contracts and Legal
Mark Jensen	Sr. Water Resources Engineer
Jim Hayden	Construction Engineer
William James	Sr. Project Manager
Moenes E. Youannis	Procurement/Project Management Specialist
Terri Stiffler	Construction Management QA/QC Engineer
Sergo Gviniashvili	Procurement/Finance Specialist
Ivane Manjgaladze	Infrastructure Engineer
Giorgi Avsajanishvili	Housing Engineer
Otar Maghalashvili	Irrigation Engineer
Mamuka Gvilava	Environmental Consultant

5.3 Home Office Staff

The Tetra Tech home office management staff supporting the project are listed below:

NAME	POSITION
Firouz Rooyani	A&E IQC Program Manager
Thomas Chicca	Task Order Manager & QA/QC
Shelly Rice	Subcontract Specialist
Renee Valentino	Contract Manager

5.4 Other Administrative & Staff Issues

Purchase Orders for local Contract Services during the quarter included:

- Two local civil engineers, Gela Bochorishvili and George Kvetenadze, were contracted to conduct site visits for component 3b. Buildings Western Georgia for 65 buildings.
- Givi Varduashvili, Senior Civil Engineer was contracted to provide technical support to assist in the inspection of hospital buildings to determine their suitability for rehabilitation under GMIP Component 3: IDP Durable Housing.
- Vasil Apkhazava, QA/QC engineer, was contracted to provide technical support to assist in preparation of a Tetra Tech quality control monitoring, inspection and acceptance program.
- Giorgi Bichiashvili, Infrastructure Engineer, was contracted to provide technical support to assist in review for Components I (Municipal Infrastructure) Roads
- Tetra Tech has made arrangements with subcontractor Autorent Ltd for provision of auto services.
- The Tetra Tech office IT support is provided by IT Fix Ltd.
- Tetra Tech has an agreement with MagtiCom to provide corporate mobile communication service.
- Tetra Tech has an agreement with JS Insurance Company “Imedi-L” to provide health insurance service for LTTA project staff.
- LTD “Caucasus Online” provides GMIP office with high speed internet.
- Tetra Tech signed a fixed price agreement with General Partnership “Kavtaradze & Partners” to provide various legal services to GMIP.

6. STATUS OF FINANCES AND EXPENDITURES

Financial summary for the reporting period October – December 2011 is presented below:

Contract No.: EDH-I-00-08-00027-00
Order No. : AID-114-TO-11-00002
Georgia Municipal Infrastructure Project
Tetra Tech EMI
Reporting Period: Oct - Dec 2011
Funding to Date: \$2,800,000

Expense Type	Budget	Previous Period	Current Quarter	Cumulative To Date	Balance	Expended
Salaries Workdays Ordered	\$43,703	\$2,778	\$1,760	\$4,538	\$39,165	10%
Fringe/Overhead	\$38,515	\$2,448	\$1,584	\$4,032	\$34,483	10%
Other Direct Costs/Travel	\$4,751	\$126	\$83	\$209	\$4,542	4%
Intercompany/Subcontractors	\$4,368,582	\$212,030	\$308,314	\$520,344	\$3,848,238	12%
G&A	\$9,306	\$573	\$348	\$921	\$8,385	10%
Subtotal	\$4,464,856	\$217,956	\$312,089	\$530,044	\$3,934,812	12%
Fixed Fee	\$312,540	\$15,257	\$21,846	\$37,103	\$275,437	12%
Total	\$4,777,396	\$233,212	\$333,935	\$567,148	\$4,210,248	12%

Source: Tetra Tech Voucher # 50515128 (Nov 25, 11); Estimated for Dec 11.

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